



THE UNIVERSITY *of* EDINBURGH

# Edinburgh Physics Jamboree

## $H \rightarrow bb$

Wahid Bhimji

for Ben S; Brendan; Chiara; Flavia; Paul; Tim  
Victoria

# Current Activities

## ◆ Substructure

- ★ 7 /8 TeV analyses (Brendan; Chiara; Wahid (and Robert etc.) - in B&C theses, not public

## ◆ HCP/EPS analyses (Ben, Chiara, Manuel)

- ★ Diboson observation; Overall fit (Chiara)

## ◆ Upcoming paper analysis (Manuel, Tim)

- ★ Kinematic likelihood fit; el iso eff/ scale (Manuel)
- ★ WH inputs and MVA (Tim)
- ★ Trigger efficiencies; Theory systematics (Ben)

## ◆ Prospects (Flavia; Paul; Victoria)

- ★ 14 TeV smeared-MC analysis: public mid-Dec.

# Some future interests

## ◆ Interests:

- ★ Substructure (most people)
- ★ Jets (Victoria (and others) )
- ★ b-tagging (Manuel)

## ◆ Other ideas:

- ★ Single top Wt fit in data (Chiara)

## ◆ Skills

- ★ Substructure
- ★ Computing
- ★ Simulation / MC
- ★ Fitting (Stats)

# Plans.. Questions...

- ◆ Some of our interests can be studied now (e.g.  $Wt$  , substructure for prospects analysis)
- ◆ “Data challenge” next April/March
  - ★ Group plans to include substructure analysis.
  - ★ We should be involved in that of course.
- ◆ What about VBF  $H \rightarrow bb$ ?
- ◆ What about other Higgs / exotic things ( $\rightarrow bb$ )?